Macroinvertebrate Identification Chart

Macroinvertebrate	**Looks Like…** (draw the invertebrate here)	**Represented by…** (for example beads, coins, etc.)
Mayflies (Order *Ephemeroptera*)		
Stoneflies (Order *Plecoptera*)		
Caddisflies (Order *Trichoptera*)		
Dobsonflies (Order *Megaloptera*)		
Midges (Order *Chironomidae*)		
Craneflies (Order *Diptera*)		
Dragonflies (Order *Odonata*)		
Scuds (Order *Amphipoda*)		
Pouch Snails (Class *Gastropoda*)		
Tubifex Worms (Class *Oligochaeta*)		
Leeches (Class *Hirundinea*)		

Macroinvertebrate Data Sheet I

Stream #: _____

Recorded by: _____

Date of Sampling: _____

Percent Composition of Major Groups:

After the macroinvertebrates are sorted, tabulate the number of organisms for each of the major groups listed below and calculate their percent composition. This measure yields the relative abundance of macroinvertebrates within your sample.

Percent Composition = Number of Organisms in Each Group / Total Number of Organisms

Macroinvertebrate	**Number of Organisms in each group**	**Percent Composition**
Mayflies (Order *Ephemeroptera*)		
Stoneflies (Order *Plecoptera*)		
Caddisflies (Order *Trichoptera*)		
Dobsonflies (Order *Megaloptera*)		
Midges (Order *Chironomidae*)		
Craneflies (Order *Diptera*)		
Dragonflies (Order *Odonata*)		
Scuds (Order *Amphipoda*)		
Pouch Snails (Class *Gastropoda*)		
Tubifex Worms (Class *Oligochaeta*)		
Leeches (Class *Hirundinea*)		
Total Number of Organisms		

Macroinvertebrate Data Sheet II

Pollution Tolerance Index

1. Place a check next to each macroinvertebrate group present in your sample. For example, whether you found one mayfly or fifty mayflies, place just ***ONE CHECK*** next to the mayfly line in group 1.
2. Complete the chart for all of the macroinvertebrate groups.
3. Calculate the group scores using the multipliers provided.
4. Total all of the group scores for your Total Score.
5. Compare your Total Score with the Water Quality Assessment Chart scores and record the relative water quality rating for your stream sample.

Stream #: _____

Recorded by: _____

Date of Sampling: _____

Group 1 Macroinvertebrates: Very Intolerant	Group 2 Macroinvertebrates: Intolerant	Group 3 Macroinvertebrates: Tolerant	Group 4 Macroinvertebrates: Very Tolerant
___Stoneflies ___Mayflies ___Caddisflies ___Dobsonflies	___Dragonflies ___Scuds ___Craneflies	___Midges ___Leeches	___Pouch Snails ___Tubifex Worms
# of checks = ___ X4 Group Score = ___	# of checks = ___ X3 Group Score = ___	# of checks = ___ X2 Group Score = ___	# of checks = ___ X1 Group Score = ___
Total Score = ___ Your Water Quality Assessment:		Water Quality Assessment Chart: ≥23 Potentially Excellent Water Quality 17-22 Potentially Good Water Quality 11-16 Potentially Fair Water Quality ≤10 Potentially Poor Water Quality	